Author Index

Aguiló, A., Castaño, E., Tauler, P., Guix, M.P., Serra, N., and Pons, A. Participation of blood cells in the changes of blood amino acid concentrations during maximal exercise, 81
Akatsuka, N.: *See* Hara, H., 52
Alemany, M.: *See* López-Martí, J., 530
Almeida, L.M.: *See* Serafini, M., 585
Alvarez, B.: *See* Carbó, N., 431
Aoyama, Y., and Wada, M. Supplementation of orotic acid to the casein, but not to egg protein, soy protein, or wheat gluten diets, increases serum ornithine carbamoyltransferase activity, 306
Aranda, P.: *See* Sanchez-Morito, N., 103
Argilés, J.M.: *See* Carbó, N., 431
Arhan, P.: *See* Vaghefi, N., 562
Arivazhagan, P., Thilakavathy, T., and Panneerselvam, C. Antioxidant lipoate and tissue antioxidants in aged rats, 122
Arjmandi, B.H.: *See* Lucas, E.A., 255
Armand, M.: *See* Juhel, C., 45
Arun, O.S.: *See* Rajakrishnan, V., 509
Atkinson, C.: *See* Liggins, J., 326
Attaix, D.: *See* Samuels, S.E., 496
Awad, A.B., Begdache, L.A., and Fink, C.S. Effect of sterols and fatty acids on growth and triglyceride accumulation in 3T3-L1 cells, 153

Badmaev, V., Majeed, M., and Prakash, L. Piperine derived from black pepper increases the plasma levels of coenzyme Q10 following oral supplementation, 109
Barakat, H.A.: *See* MacLean, P.S., 318
Basu, T.K.: *See* Lu, J., 515
Bauchart, D.: *See* Piot, C., 231
Begdache, L.A.: *See* Awad, A.B., 153
Beguin, Y.: *See* Roodenburg, A.J.C., 223
Bertino, E.: *See* Conti, A., 332
Beynen, A.C.: *See* Roodenburg, A.J.C., 223
Beynen, A.C.: *See* Terpstra, A.H.M., 311
Bidwell, C.A.: *See* Spurlock, M.E., 260
Bingham, S.A.: *See* Liggins, J., 326
Bjerkeng, B.: *See* Østerlie, M., 482
Bluck, L.J.C.: *See* Liggins, J., 326
Blusztajn, J.K.: *See* Malik, M.A., 2
Boileau, A.C., Lee, C.M., and Erdman, J.W., Jr. Vitamin A deficiency reduces uptake of β-carotene by brush border membrane vesicles but does not alter intestinal retinyl ester hydrolase activity in the rat, 436
Bomont, C.: *See* Puchowicz, M.A., 281
Bouglé, D.: *See* Vaghefi, N., 562
Bréque, J.: *See* Panserat, S., 22
Brunengraber, H.: *See* Puchowicz, M.A., 281
Bureau, F.: *See* Vaghefi, N., 562
Busquets, S.: *See* Carbó, N., 431
Butler, J.A.: *See* Moore, M.A., 341

Carbó, N., Ribas, V., Busquets, S., Alvarez, B., López-Soriano, F.J., and Argilés, J.M. Short-term effects of leptin on skeletal muscle protein metabolism in the rat, 431
Carraturo, A.: *See* Tedesco, I., 114
Castaño, E.: *See* Aguiló, A., 81
Cavaglieri, C.R., Martins, E.F., Colleone, V.V., Rodrigues, C., Vecchia, M.G., and Curi, R. Fiber-rich diets alter rat intestinal leukocytes metabolism, 555
Cha, J.: *See* Glahn, R.P., 62
Chanussot, F.: *See* Mastellone, I., 461
Chen, T.C., Persons, K.S., Lu, Z., Mathieu, J.S., and Holick, M.F. An evaluation of the biologic activity and vitamin D receptor binding affinity of the photoisomers of vitamin D_3 and previtamin D_3, 267
Chen, Z.Y.: *See* Zhu, Q.Y., 14
Chiba, T.: *See* Miura, Y., 216
Chicco, A.: *See* D'Alessandro, M.E., 273
Chicco, A.: *See* Montes, M., 30
Cho, Y.-W.: *See* Kim, K.-S., 420
Cogan, U.: *See* Hochgraf, E., 176
Colleone, V.V.: *See* Cavaglieri, C.R., 555
Conti, A., Giuffrida, M.G., Napolitano, L., Quaranta, S., Bertino, E., Coscia, A., Costa, S. and Fabris, C. Identification of the human β-casein C-terminal fragments that specifically bind to purified antibodies to bovine β-lactoglobulin, 332
Cooper, D.: *See* Kong, S.-E., 393
Cornelius, S.G.: *See* Spurlock, M.E., 260
Coscia, A.: *See* Conti, A., 332
Costa, S.: *See* Conti, A., 332
Coudray, C.: *See* Lopez, H.W., 500
Coward, W.A.: *See* Liggins, J., 326
Crosbie, L.C.: *See* Hunter, K.A., 408
Curi, R.: *See* Cavaglieri, C.R., 555

D'Alessandro, M.E., Chicco, A., Karabatas, L., and Lombardo, Y.B. Role of skeletal muscle on impaired insulin sensitivity in rats fed a sucrose-rich diet: Effect of moderate levels of dietary fish oil, 273
Danial, A.Md.: *See* Ismail, M., 536
Daohua, P.: *See* Umegaki, K., 401
David, F.: *See* Puchowicz, M.A., 281
de la Maisonneuve, C.: *See* Mastellone, I., 461
del Mar Grasa, M.: *See* López-Martí, J., 530
Demigné, C.: *See* Lopez, H.W., 500
de Roos, B.: *See* Terpstra, A.H.M., 311
DeSimone, A.P.: *See* Wilson, T.A., 443
Díaz-Silva, M.: *See* López-Martí, J., 530
Domingo, N.: *See* Mastellone, I., 461
Du, S.-H.: *See* Moore, M.A., 341
Duan, R.-D.: *See* Liu, J.-J., 192
Duan, R.-D.: *See* Nyberg, L., 244
Duan, R.-D.: *See* Pajari, A.-M., 474
Dutta-Roy, A.K.: *See* Hunter, K.A., 408

Eder, K.: *See* Kettler, S.I., 132
Erdman, J.W., Jr.: *See* Boileau, A.C., 436
Ezaki, O.: *See* Kim, K.-S., 420

Fabris, C.: *See* Conti, A., 332
Failla, M.L.: *See* Garrett, D.A., 574
Fantozzi, P.: *See* Ghiselli, A., 76
Farnarier, C.: *See* Mastellone, I., 461
Faruolo, C.: *See* Tedesco, I., 114
Feillet-Coudray, C.: *See* Lopez, H.W., 500
Fentress, H.M.: *See* Wang, J.J.-L., 208
Fernandez, M.L.: *See* Ramjiganesh, T., 358
Fernández-López, J.-A.: *See* López-Martí, J., 530
Field, C.J.: *See* Lu, J., 515
Fink, C.S.: *See* Awad, A.B., 153

Garrett, D.A., Failla, M.L., Sarama, R.J. Estimation of carotenoid bioavailability from fresh stir-fried vegetables using an in vitro digestion/Caco-2 cell culture model, 574
Ghiselli, A., Natella, F., Guidi, A., Montanari, L., Fantozzi, P., and Scaccini, C. Beer increases plasma antioxidant capacity in humans, 76
Giuffrida, M.G.: *See* Conti, A., 332
Glahn, R.P., Rassier, M., Goldman, M.I., Lee, O.A., and Cha, J. A comparison of iron availability from commercial iron preparations using an in vitro digestion/Caco-2 cell culture model, 62
Goldman, M.I.: *See* Glahn, R.P., 62
Greenwood, C.E.: *See* R Malik, M.A., 2
Grès, S.: *See* Mastellone, I., 461
Guidi, A.: *See* Ghiselli, A., 76
Guillochon, D.: *See* Vaghefi, N., 562
Guix, M.P.: *See* Aguiló, A., 81

Hall, J.C.: *See* Kong, S.-E., 393
Han, S.N.: *See* Rall, L.C., 581
Hao, E.: *See* MacLean, P.S., 318
Hara, H., Hashimoto, N., Akatsuka, N., and Kasai, T. Induction of pancreatic trypsin by dietary amino acids in rats: Four trypsinogen isozymes and cholecystokinin messenger RNA, 52
Hashimoto, N.: *See* Hara, H., 52
Herpin, P.: *See* Piot, C., 231
Hickey, M.S. Review of *Macroelements, Water, and Electrolytes in Sports Nutrition*, by J.A. Driskell and I. Wolinsky, 239
Higuchi, M.: *See* Umegaki, K., 401

J. Nutr. Biochem. 11:592–597, 2000

© Elsevier Science Inc. 2000. All rights reserved.

655 Avenue of the Americas, New York, NY 10010

0955-2863/00/$–see front matter
PII S0955-2863(00)00154-6

Author Index

Aguiló, A., Castaño, E., Tauler, P., Guix, M.P., Serra, N., and Pons, A. Participation of blood cells in the changes of blood amino acid concentrations during maximal exercise, 81
Akatsuka, N.: *See* Hara, H., 52
Alemany, M.: *See* López-Martí, J., 530
Almeida, L.M.: *See* Serafini, M., 585
Alvarez, B.: *See* Carbó, N., 431
Aoyama, Y., and Wada, M. Supplementation of orotic acid to the casein, but not to egg protein, soy protein, or wheat gluten diets, increases serum ornithine carbamoyltransferase activity, 306
Aranda, P.: *See* Sanchez-Morito, N., 103
Argilés, J.M.: *See* Carbó, N., 431
Arhan, P.: *See* Vaghefi, N., 562
Arivazhagan, P., Thilakavathy, T., and Panneerselvam, C. Antioxidant lipoate and tissue antioxidants in aged rats, 122
Arjmandi, B.H.: *See* Lucas, E.A., 255
Armand, M.: *See* Juhel, C., 45
Arun, O.S.: *See* Rajakrishnan, V., 509
Atkinson, C.: *See* Liggins, J., 326
Attaix, D.: *See* Samuels, S.E., 496
Awad, A.B., Begdache, L.A., and Fink, C.S. Effect of sterols and fatty acids on growth and triglyceride accumulation in 3T3-L1 cells, 153

Badmaev, V., Majeed, M., and Prakash, L. Piperine derived from black pepper increases the plasma levels of coenzyme Q10 following oral supplementation, 109
Barakat, H.A.: *See* MacLean, P.S., 318
Basu, T.K.: *See* Lu, J., 515
Bauchart, D.: *See* Piot, C., 231
Begdache, L.A.: *See* Awad, A.B., 153
Beguin, Y.: *See* Roodenburg, A.J.C., 223
Bertino, E.: *See* Conti, A., 332
Beynen, A.C.: *See* Roodenburg, A.J.C., 223
Beynen, A.C.: *See* Terpstra, A.H.M., 311
Bidwell, C.A.: *See* Spurlock, M.E., 260
Bingham, S.A.: *See* Liggins, J., 326
Bjerkeng, B.: *See* Østerlie, M., 482
Bluck, L.J.C.: *See* Liggins, J., 326
Blusztajn, J.K.: *See* Malik, M.A., 2
Boileau, A.C., Lee, C.M., and Erdman, J.W., Jr. Vitamin A deficiency reduces uptake of β-carotene by brush border membrane vesicles but does not alter intestinal retinyl ester hydrolase activity in the rat, 436
Bomont, C.: *See* Puchowicz, M.A., 281
Bouglé, D.: *See* Vaghefi, N., 562
Bréque, J.: *See* Panserat, S., 22
Brunengraber, H.: *See* Puchowicz, M.A., 281
Bureau, F.: *See* Vaghefi, N., 562
Busquets, S.: *See* Carbó, N., 431
Butler, J.A.: *See* Moore, M.A., 341

Carbó, N., Ribas, V., Busquets, S., Alvarez, B., López-Soriano, F.J., and Argilés, J.M. Short-term effects of leptin on skeletal muscle protein metabolism in the rat, 431
Carraturo, A.: *See* Tedesco, I., 114
Castaño, E.: *See* Aguiló, A., 81
Cavaglieri, C.R., Martins, E.F., Colleone, V.V., Rodrigues, C., Vecchia, M.G., and Curi, R. Fiber-rich diets alter rat intestinal leukocytes metabolism, 555
Cha, J.: *See* Glahn, R.P., 62
Chanussot, F.: *See* Mastellone, I., 461
Chen, T.C., Persons, K.S., Lu, Z., Mathieu, J.S., and Holick, M.F. An evaluation of the biologic activity and vitamin D receptor binding affinity of the photoisomers of vitamin D_3 and previtamin D_3, 267
Chen, Z.Y.: *See* Zhu, Q.Y., 14
Chiba, T.: *See* Miura, Y., 216
Chicco, A.: *See* D'Alessandro, M.E., 273
Chicco, A.: *See* Montes, M., 30
Cho, Y.-W.: *See* Kim, K.-S., 420
Cogan, U.: *See* Hochgraf, E., 176
Colleone, V.V.: *See* Cavaglieri, C.R., 555
Conti, A., Giuffrida, M.G., Napolitano, L., Quaranta, S., Bertino, E., Coscia, A., Costa, S. and Fabris, C. Identification of the human β-casein C-terminal fragments that specifically bind to purified antibodies to bovine β-lactoglobulin, 332
Cooper, D.: *See* Kong, S.-E., 393
Cornelius, S.G.: *See* Spurlock, M.E., 260
Coscia, A.: *See* Conti, A., 332
Costa, S.: *See* Conti, A., 332
Coudray, C.: *See* Lopez, H.W., 500
Coward, W.A.: *See* Liggins, J., 326
Crosbie, L.C.: *See* Hunter, K.A., 408
Curi, R.: *See* Cavaglieri, C.R., 555

D'Alessandro, M.E., Chicco, A., Karabatas, L., and Lombardo, Y.B. Role of skeletal muscle on impaired insulin sensitivity in rats fed a sucrose-rich diet: Effect of moderate levels of dietary fish oil, 273
Danial, A.Md.: *See* Ismail, M., 536
Daohua, P.: *See* Umegaki, K., 401
David, F.: *See* Puchowicz, M.A., 281
de la Maisonneuve, C.: *See* Mastellone, I., 461
del Mar Grasa, M.: *See* López-Martí, J., 530
Demigné, C.: *See* Lopez, H.W., 500
de Roos, B.: *See* Terpstra, A.H.M., 311
DeSimone, A.P.: *See* Wilson, T.A., 443
Díaz-Silva, M.: *See* López-Martí, J., 530
Domingo, N.: *See* Mastellone, I., 461
Du, S.-H.: *See* Moore, M.A., 341
Duan, R.-D.: *See* Liu, J.-J., 192
Duan, R.-D.: *See* Nyberg, L., 244
Duan, R.-D.: *See* Pajari, A.-M., 474
Dutta-Roy, A.K.: *See* Hunter, K.A., 408

Eder, K.: *See* Kettler, S.I., 132
Erdman, J.W., Jr.: *See* Boileau, A.C., 436
Ezaki, O.: *See* Kim, K.-S., 420

Fabris, C.: *See* Conti, A., 332
Failla, M.L.: *See* Garrett, D.A., 574
Fantozzi, P.: *See* Ghiselli, A., 76
Farnarier, C.: *See* Mastellone, I., 461
Faruolo, C.: *See* Tedesco, I., 114
Feillet-Coudray, C.: *See* Lopez, H.W., 500
Fentress, H.M.: *See* Wang, J.J.-L., 208
Fernandez, M.L.: *See* Ramjiganesh, T., 358
Fernández-López, J.-A.: *See* López-Martí, J., 530
Field, C.J.: *See* Lu, J., 515
Fink, C.S.: *See* Awad, A.B., 153

Garrett, D.A., Failla, M.L., Sarama, R.J. Estimation of carotenoid bioavailability from fresh stir-fried vegetables using an in vitro digestion/Caco-2 cell culture model, 574
Ghiselli, A., Natella, F., Guidi, A., Montanari, L., Fantozzi, P., and Scaccini, C. Beer increases plasma antioxidant capacity in humans, 76
Giuffrida, M.G.: *See* Conti, A., 332
Glahn, R.P., Rassier, M., Goldman, M.I., Lee, O.A., and Cha, J. A comparison of iron availability from commercial iron preparations using an in vitro digestion/Caco-2 cell culture model, 62
Goldman, M.I.: *See* Glahn, R.P., 62
Greenwood, C.E.: *See* R Malik, M.A., 2
Grès, S.: *See* Mastellone, I., 461
Guidi, A.: *See* Ghiselli, A., 76
Guillochon, D.: *See* Vaghefi, N., 562
Guix, M.P.: *See* Aguiló, A., 81

Hall, J.C.: *See* Kong, S.-E., 393
Han, S.N.: *See* Rall, L.C., 581
Hao, E.: *See* MacLean, P.S., 318
Hara, H., Hashimoto, N., Akatsuka, N., and Kasai, T. Induction of pancreatic trypsin by dietary amino acids in rats: Four trypsinogen isozymes and cholecystokinin messenger RNA, 52
Hashimoto, N.: *See* Hara, H., 52
Herpin, P.: *See* Piot, C., 231
Hickey, M.S. Review of *Macroelements, Water, and Electrolytes in Sports Nutrition*, by J.A. Driskell and I. Wolinsky, 239
Higuchi, M.: *See* Umegaki, K., 401

J. Nutr. Biochem. 11:592–597, 2000

© Elsevier Science Inc. 2000. All rights reserved.

655 Avenue of the Americas, New York, NY 10010

0955-2863/00/$–see front matter
PII S0955-2863(00)00154-6

Hochgraf, E., Cogan, U., and Mokady, S. Dietary oxidized linoleic acid enhances liver cholesterol biosynthesis and secretion in rats, 176
Hocquette, J.-F.: *See* Piot, C., 231
Holick, M.F.: *See* Chen, T.C., 267
Hong, K.H., Keen, C.L., Mizuno, Y., Johnston, K.E., Tamura, T. Effects of dietary zinc deficiency on homocysteine and folate metabolism in rats, 165
Hongu, N.: *See* Sachan, D.S., 521
Hornstra, G.: *See* van Gool, C.J.A.W., 543
Houseknecht, K.L.: *See* Spurlock, M.E., 260
Hu, M.-L.: *See* Yeh, S.-L., 548
Hua, Z.: *See* Wang, J.J.-L., 208
Huang, Y.: *See* Zhu, Q.Y., 14
Hung, M.-C., Shibasaki, K., Nishizono, S., Sato, M., Ikeda, I., Masuda, Y., Kunou, M., Kawamura, M., Yamashita, M., Inoue, S., and Imaizumi, K. Ibotenic acid-induced lesions of the medial septum increase hippocampal membrane associated protein kinase C activity and reduce acetylcholine synthesis: Prevention by a phosphatidylcholine/vitamin B_{12} diet, 159
Hunter, K.A., Crosbie, L.C., Weir, A., Miller, G.J., and Dutta-Roy, A. K. A residential study comparing the effects of diets rich in stearic acid, oleic acid, and linoleic acid on fasting blood lipids, hemostatic variables and platelets in young healthy men, 408

Iacomino, G.: *See* Tedesco, I., 114
Ikeda, I.: *See* Hung, M.-C., 159
Ikeda, M.: *See* Miura, Y., 216
Imaizumi, K.: *See* Hung, M.-C., 159
Inoue, S.: *See* Hung, M.-C., 159
Ismail, A., and Namala, R. Impaired glucose tolerance in vitamin D deficiency can be corrected by calcium, 170
Ismail, M., Manickam, E., Danial, A.Md., Rahmat, A., and Yahaya, A. Chemical composition and antioxidant activity of *Strobilanthes crispus* leaf extract, 536
Izawa, T.: *See* Yamagishi, H., 455

Jahangiri, A.: *See* Leifert, W.R., 38
Jahangiri, A.: *See* Leifert, W.R., 382
Jansen, G.R. A comparison of extrahepatic lipogenesis from a small glucose meal in obob and gold thioglucose obese mice fed low- or high-fat diets with or without the addition of Δ^{22}-5β-taurocholenic acid, 87
Jayadeep, A.: *See* Rajakrishnan, V., 509
Johansson, A.K., Korte, H., Yang, B., Stanley, J.C., and Kallio, H.P. Sea buckthorn berry oil inhibits platelet aggregation, 491
Johnston, K.E.: *See* Hong, K.H., 165
Juhel, C., Armand, M., Pafumi, Y., Rosier, C., Vandermander, J., and Lairon, D. Green tea extract (AR25®) inhibits lipolysis of triglycerides in gastric and duodenal medium in vitro, 45
Juma, S.: *See* Lucas, E.A., 255

Kalimo, K.O.: *See* Yang, B., 338
Kallio, H.P.: *See* Johansson, A.K., 491
Kallio, H.P.: *See* Yang, B., 338
Kaplanski, G.: *See* Mastellone, I., 461
Karabatas, L.: *See* D'Alessandro, M.E., 273
Kasai, M.: *See* Yamasaki, M., 467
Kasai, T.: *See* Hara, H., 52
Katajisto, J.K.: *See* Yang, B., 338
Katan, M.B.: *See* Terpstra, A.H.M., 311
Kaushik, S.: *See* Panserat, S., 22
Kautiainen, A., Törnqvist, M., and Olsson, U. Effects of selenium deficiency on the formation and detoxification of endogenous electrophiles in rats, 425
Kawamura, M.: *See* Hung, M.-C., 159
Keen, C.L.: *See* Hong, K.H., 165
Kern, M., Lagomarcino, N.D., Misell, L.M., and Schuster, V. The effect of medium-chain triacylglycerols on the blood lipid profile of male endurance runners, 288
Kettler, A.: *See* Kettler, S.I., 132
Kettler, S.I., Eder, K., Kettler, A., and Kirchgessner, M. Zinc deficiency and the activities of lipoprotein lipase in plasma and tissues of rats force-fed diets with coconut oil or fish oil, 132
Kim, C.-H.: *See* Kim, K.-S., 420
Kim, K.-S., Seo, E.-K., Lee, Y.-C., Lee, T.-K., Cho, Y.-W., Ezaki, O., and Kim, C.-H. Effect of dietary *Platycodon grandiflorum* on the improvement of insulin resistance in obese Zucker rats, 420
Kimura, M.: *See* Umegaki, K., 401
Kirchgessner, M.: *See* Kettler, S.I., 132
Kobayashi, H.: *See* Nagao, A., 348
Komabayashi, T.: *See* Yamagishi, H., 455
Kong, S.-E., Hall, J.C., Cooper, D., and McCauley, R.D. Starvation alters the activity and mRNA level of glutaminase and glutamine synthetase in the rat intestine, 393
Korte, H.: *See* Johansson, A.K., 491
Koshy, J.: *See* Puchowicz, M.A., 281
Kumar, M.V., Sambaiah, K., and Lokesh, B.R. Hypocholesterolemic effect of anhydrous milk fat ghee is mediated by increasing the secretion of biliary lipids, 69
Kummerow, F.A.: *See* Mahfouz, M.M., 293
Kunou, M.: *See* Hung, M.-C., 159

Lagomarcino, N.D.: *See* Kern, M., 288
Lai, N.T.: *See* Samman, S., 250
Lai, T.P.: *See* Ming, Q.Z., 367
Lairon, D.: *See* Juhel, C., 45
Laranjinha, J.A.N.: *See* Serafini, M., 585
Lebrun, F.: *See* Vaghefi, N., 562
Lee, C.M.: *See* Boileau, A.C., 436
Lee, O.A.: *See* Glahn, R.P., 62
Lee, T.-K.: *See* Kim, K.-S., 420
Lee, Y.-C.: *See* Kim, K.-S., 420
Legrande, P.: *See* Rioux, V., 198
Leifert, W.R., Jahangiri, A., and McMurchie, E.J. Membrane fluidity changes are associated with the antiarrhythmic effects of docosahexaenoic acid in adult rat cardiomyocytes, 38
Leifert, W.R., Jahangiri, A., Saint, D.A., and McMurchie, E.J. Effects of dietary n-3 fatty acids on contractility, Na^+ and K^+ currents in a rat cardiomyocyte model of arrhythmia, 382
Lemarchal, P.: *See* Rioux, V., 198
Levrat-Verny, M.-A.: *See* Lopez, H.W., 500
Liaaen-Jensen, S.: *See* Østerlie, M., 482
Liggins, J., Bluck, L.J.C., Runswick, S., Atkinson, C. Coward, W.A., and Bingham, S.A. Daidzein and genistein content of fruits and nuts, 326
Lim, B.P.: *See* Nagao, A., 348
Liu, J.-J., Nilsson, Å., and Duan, R.-D. Effects of phospholipids on sphingomyelin hydrolysis induced by intestinal alkaline sphingomyelinase: An in vitro study, 192
Llopis, J.: *See* Sanchez-Morito, N., 103
Lokesh, B.R.: *See* Kumar, M.V., 69
Lombardo, Y.B.: *See* D'Alessandro, M.E., 273
Lombardo, Y.B.: *See* Montes, M., 30
Lönnerdal, B.: *See* Shin, K., 94
Lopez, H.W., Coudray, C., Levrat-Verny, M.-A., Feillet-Coudray, C., Demigné, C., and Rémésy, C. Fructooligosaccharides enhance mineral apparent absorption and counteract the deleterious effects of phytic acid on mineral homeostasis in rats, 500
López-Martí, J., Díaz-Silva, M., Salas, A., del Mar Grasa, M., Fernández-López, J.-A., Remesar, X., and Alemany, M. Oleoyl-estrone induces the massive loss of body weight in Zucker *fa/fa* rats fed a high-energy hyperlipidic diet, 530
López-Soriano, F.J.: *See* Carbó, N., 431
Lorec, A.-M.: *See* Mastellone, I., 461
Lu, J., Field, C.J., and Basu, T.K. The immune responses to diabetes in BB rats supplemented with vitamin A, 515
Lu, Z.: *See* Chen, T.C., 267
Lucas, E.A., Juma, S., Stoecker, B.J., and Arjmandi, B.H. Prune suppresses ovariectomy-induced hypercholesterolemia in rats, 255

MacLean, P.S., Vadlamudi, S., Hao, E., and Barakat, H.A. Differential expression of cholesteryl ester transfer protein in the liver and plasma of fasted and fed transgenic mice, 318
Maeda, M.: *See* Nagao, A., 348
Mahfouz, M.M., and Kummerow, F.A. Cholesterol-rich diets have different effects on lipid peroxidation, cholesterol

oxides, and antioxidant enzymes in rats and rabbits, 293
Maiani, G.: *See* Serafini, M., 585
Majeed, M.: *See* Badmaev, V., 109
Malik, M.A., Blusztajn, J.K., and Greenwood, C.E. Nutrients as trophic factors in neurons and the central nervous system: Role of retinoic acid, 2
Manickam, E.: *See* Ismail, M., 536
Mansho, K.: *See* Yamasaki, M., 467
Marin, V.: *See* Mastellone, I., 461
Martins, E.F.: *See* Cavaglieri, C.R., 555
Marx, J.J.M.: *See* Roodenburg, A.J.C., 223
Mastellone, I., Polichetti, E., Grès, S., de la Maisonneuve, C., Domingo, N., Marin, V., Lorec, A.-M., Farnarier, C., Portugal, H., Kaplanski, G., and Chanussot, F. Dietary soybean phosphatidylcholines lower lipidemia: Mechanisms at the levels of intestine, endothelial cell, and hepato-biliary axis, 461
Masuda, Y.: *See* Hung, M.-C., 159
Mathieu, J.S.: *See* Chen, T.C., 267
Mattila, L.M.: *See* Yang, B., 338
McCauley, R.D.: *See* Kong, S.-E., 393
McIntyre, J.C.: *See* Ramjiganesh, T., 358
McMurchie, E.J.: *See* Leifert, W.R., 38
McMurchie, E.J.: *See* Leifert, W.R., 382
McNeel, R.L., and Mersmann, H.J. Nutritional deprivation reduces the transcripts for transcription factors and adipocyte-characteristic proteins in porcine adipocytes, 139
Médale, F.: *See* Panserat, S., 22
Menon, V.P.: *See* Rajakrishnan, V., 509
Mersmann, H.J.: *See* McNeel, R.L., 139
Meydani, M.: *See* Rall, L.C., 581
Meydani, S.N.: *See* Rall, L.C., 581
Miller, G.J.: *See* Hunter, K.A., 408
Millo, H., and Werman, M.J. Hepatic fructose-metabolizing enzymes and related metabolites: Role of dietary copper and gender, 374
Ming, Q.Z., Sheng, X.D., and Lai, T.P. Changes of transferrin-free iron uptake by bone marrow erythroblasts in strenuously exercised rats, 367
Misell, L.M.: *See* Kern, M., 288
Miura, S.: *See* Miura, Y., 216
Miura, Y., Chiba, T., Miura, S., Tomita, I., Umegaki, K., Ikeda, M., and Tomita, T. Green tea polyphenols (flavan 3-ols) prevent oxidative modification of low density lipoproteins: An ex vivo study in humans, 216
Miyazawa, T.: *See* Sugawara, T., 147
Mizuno, Y.: *See* Hong, K.H., 165
Moio, L.: *See* Tedesco, I., 114
Mokady, S.: *See* Hochgraf, E., 176
Montanari, L.: *See* Ghiselli, A., 76
Montes, M., Chicco, A., and Lombardo, Y.B. The effect of insulin on the uptake and metabolic fate of glucose in isolated perfused hearts of dyslipemic rats, 30
Moore, M.A., Wander, R.C., Xia, Y.-M., Du, S.-H., Butler, J.A., and Whanger, P.D. Selenium supplementation of Chinese women with habitually low selenium intake increases plasma selenium, plasma glutathione peroxidase activity, and milk selenium, but not milk glutathione peroxidase activity, 341
Mutanen, M.: *See* Pajari, A.-M., 474

Nagao, A., Maeda, M., Lim, B.P., Kobayashi, H., and Terao, J. Inhibition of β-carotene-15,15′-dioxygenase activity by dietary flavonoids, 348
Nakano, T.: *See* Suetsuna, K., 450
Namala, R.: *See* Ismail, A., 170
Napolitano, L.: *See* Conti, A., 332
Natella, F.: *See* Ghiselli, A., 76
Neuville, D.: *See* Vaghefi, N., 562
Nicolosi, R.J.: *See* Ramjiganesh, T., 358
Nicolosi, R.J.: *See* Wilson, T.A., 443
Nilsson, Å.: *See* Liu, J.-J., 192
Nilsson, Å.: *See* Nyberg, L., 244
Nishizono, S.: *See* Hung, M.-C., 159
Nyberg, L., Duan, R.-D., and Nilsson, Å. A mutual inhibitory effect on absorption of sphingomyelin and cholesterol, 244

Ochi, H.: *See* Suetsuna, K., 128
Oda, H., Suzuki, Y., Wakayama, M., and Yoshida, A. Apolipoprotein A-I gene expression is upregulated by polychlorinated biphenyls in rat liver, 568
Ogino, Y.: *See* Yamasaki, M., 467
Oikarinen, S.I.: *See* Pajari, A.-M., 474
Okazaki, H.: *See* Yamagishi, H., 455
Olsson, U.: *See* Kautiainen, A., 425
Østerlie, M., Bjerkeng, B., and Liaaen-Jensen, S. Plasma appearance and distribution of astaxanthin *E/Z* and *R/S* isomers in plasma lipoproteins of men after single dose administration of astaxanthin, 482

Pafumi, Y.: *See* Juhel, C., 45
Pajari, A.-M., Oikarinen, S.I., Duan, R.-D., and Mutanen, M. A high-beef diet alters protein kinase C isozyme expression in rat colonic mucosa, 474
Palumbo, R.: *See* Tedesco, I., 114
Panneerselvam, C.: *See* Arivazhagan, P., 122
Panserat, S., Médale, F., Bréque, J., Plagnes-Juan, E., and Kaushik, S. Lack of significant long-term effect of dietary carbohydrates on hepatic glucose-6-phosphatase expression in rainbow trout (*Oncorhynchus mykiss*), 22
Persons, K.S.: *See* Chen, T.C., 267
Piot, C., Hocquette, J.-F., Herpin, P., Veerkamp, J.H., and Bauchart, D. Dietary coconut oil affects more lipoprotein lipase activity than the mitochondria oxidative capacities in muscles of preruminant calves, 231
Plagnes-Juan, E.: *See* Panserat, S., 22
Planells, E.: *See* Sanchez-Morito, N., 103
Polichetti, E.: *See* Mastellone, I., 461
Pons, A.: *See* Aguiló, A., 81
Portocarrero, C.P.: *See* Spurlock, M.E., 260
Portugal, H.: *See* Mastellone, I., 461
Prakash, L.: *See* Badmaev, V., 109
Puchowicz, M.A., Smith, C.L., Bomont, C., Koshy, J., David, F., and Brunengraber, H. Dog model of therapeutic ketosis induced by oral administration of *R,S*-1,3-butanediol diacetoacetate, 281

Quaranta, S.: *See* Conti, A., 332

Rahmat, A.: *See* Ismail, M., 536
Rajakrishnan, V., Jayadeep, A., Arun, O.S., Sudhakaran, P.R., and Menon, V.P. Changes in the prostaglandin levels in alcohol toxicity: Effect of curcumin and N-acetylcysteine, 509
Rall, L.C., Roubenoff, R., Meydani, S.N., Han, S.N., and Meydani, M. Urinary 8-hydroxy-2′-deoxyguanosine (8-OHdG) as a marker of oxidative stress in rheumatoid arthritis and aging: Effect of progressive resistance training, 581
Ramjiganesh, T., Roy, S., Nicolosi, R.J., Young, T.L., McIntyre, J.C., and Fernandez, M.L. Corn husk oil lowers plasma LDL cholesterol concentrations by decreasing cholesterol absorption and altering hepatic cholesterol metabolism in guinea pigs, 358
Rassier, M.: *See* Glahn, R.P., 62
Remesar, X.: *See* López-Martí, J., 530
Rémésy, C.: *See* Lopez, H.W., 500
Ribas, V.: *See* Carbó, N., 431
Rioux, V., Lemarchal, P., and Legrand, P. Myristic acid, unlike palmitic acid, is rapidly metabolized in cultured rat hepatocytes, 198
Rodrigues, C.: *See* Cavaglieri, C.R., 555
Romano, C.A.: *See* Wilson, T.A., 443
Roodenburg, A.J.C., West, C.E., Beguin, Y., Van Dijk, J.E., Van Eijk, H.G., Marx, J.J.M., and Beynen, A.C. Indicators of erythrocyte formation and degradation in rats with either vitamin A or iron deficiency, 223
Rosier, C.: *See* Juhel, C., 45
Roubenoff, R.: *See* Rall, L.C., 581
Roy, S.: *See* Ramjiganesh, T., 358
Runswick, S.: *See* Liggins, J., 326
Russo, G.L.: *See* Tedesco, I., 114
Russo, M.: *See* Tedesco, I., 114
Russo, P.: *See* Tedesco, I., 114

Sachan, D.S., and Hongu, N. Increases in VO_2max and metabolic markers of fat oxidation by caffeine, carnitine, and choline supplementation in rats, 521
Saint, D.A.: *See* Leifert, W.R., 382
Salas, A.: *See* López-Martí, J., 530
Sambaiah, K.: *See* Kumar, M.V., 69
Samman, S., Lai, N.T., and Sullivan, D.R. The effect of a lipid-lowering diet on plasma lipids and lipoproteins in mildly

hypercholesterolaemic subjects: A potential role for occasional treats, 250
Samuels, S.E., and Attaix, D. Fasting does not increase mRNA levels of proteolytic systems in small intestinal mucosa of the rat, 496
Sanchez-Morito, N., Planells, E., Aranda, P., and Llopis, J. Influence of magnesium deficiency on the bioavailability and tissue distribution of iron in the rat, 103
Sarama, R.J.: *See* Garrett, D. A., 574
Sato, M.: *See* Hung, M.-C., 159
Scaccini, C.: *See* Ghiselli, A., 76
Schuster, V.: *See* Kern, M., 288
Seo, E.-K.: *See* Kim, K.-S., 420
Serafini, M., Laranjinha, J.A.N., Almeida, L.M., and Maiani, G. Inhibition of human LDL lipid peroxidation by phenol-rich beverages and their impact on plasma total antioxidant capacity in humans, 585
Serra, N.: *See* Aguiló, A., 81
Sheng, X.D.: *See* Ming, Q.Z., 367
Shibasaki, K.: *See* Hung, M.-C., 159
Shimizu, M.: *See* Yamagishi, H., 455
Shin, K., Tomita, M., and Lönnerdal, B. Identification of lactoperoxidase in mature human milk, 94
Singleton, C.K.: *See* Wang, J.J.-L., 208
Smith, C.L.: *See* Puchowicz, M.A., 281
Spurlock, M.E., Houseknecht, K.L., Portocarrero, C.P., Cornelius, S.G., Willis, G.M., and Bidwell, C.A. Regulation of PPARγ but not *obese* gene expression by dietary fat supplementation, 260
Stangl, G.I. High dietary levels of a conjugated linoleic acid mixture alter hepatic glycerophospholipid class profile and cholesterol-carrying serum lipoproteins of rats, 184
Stanley, J.C.: *See* Johansson, A.K., 491
Stoecker, B.J.: *See* Lucas, E.A., 255
Sudhakaran, P.R.: *See* Rajakrishnan, V., 509
Suetsuna, K., and Nakano, T. Identification of an antihypertensive peptide from peptic digest of wakame (*Undaria pinnatifida*), 450
Suetsuna, K., Ukeda, H., and Ochi, H. Isolation and characterization of free radical scavenging activities peptides derived from casein, 128
Sugawara, T., and Miyazawa, T. Digestion of plant monogalactosyldiacylglycerol and digalactosyldiacylglycerol in rat alimentary canal, 147
Sugisawa, A.: *See* Umegaki, K., 401
Sullivan, D.R.: *See* Samman, S., 250
Suzuki, Y.: *See* Oda, H., 568

Tachibana, H.: *See* Yamasaki, M., 467
Tahvonen, R.L.: *See* Yang, B., 338
Tamura, T.: *See* Hong, K.H., 165
Tauler, P.: *See* Aguiló, A., 81
Tedesco, I., Russo, M., Russo, P., Iacomino, G., Russo, G.L., Carraturo, A., Faruolo, C., Moio, L., and Palumbo, R. Antioxidant effect of red wine polyphenols on red blood cells, 114
Terao, J.: *See* Nagao, A., 348
Terpstra, A.H.M., Katan, M.B., Weusten-van der Wouw, M.P.M.E., de Roos, B., and Beynen, A.C. The hypercholesterolemic effect of cafestol in coffee oil in gerbils and rats, 311
Thilakavathy, T.: *See* Arivazhagan, P., 122
Tomita, I.: *See* Miura, Y., 216
Tomita, M.: *See* Shin, K., 94
Tomita, T.: *See* Miura, Y., 216
Törnqvist, M.: *See* Kautiainen, A., 425

Ukeda, H.: *See* Suetsuna, K., 128
Umegaki, K., Daohua, P., Sugisawa, A., Kimura, M., and Higuchi, M. Influence of one bout of vigorous exercise on ascorbic acid in plasma and oxidative damage to DNA in blood cells and muscle in untrained rats, 401
Umegaki, K.: *See* Miura, Y., 216

Vadlamudi, S.: *See* MacLean, P.S., 318
Vaghefi, N., Guillochon, D., Bureau, F., Neuville, D., Lebrun, F., Arhan, P., and Bouglé, D. The effect of cysteine and 2,4-dinitrophenol on heme and nonheme absorption in a rat intestinal model, 562
Vandermander, J.: *See* Juhel, C., 45
Van Dijk, J.E.: *See* Roodenburg, A.J.C., 223
Van Eijk, H.G.: *See* Roodenburg, A.J.C., 223
van Gool, C.J.A.W., van Houwelingen, A.C., and Hornstra, G. The essential fatty acid status in phenylketonuria patients under treatment, 543
van Houwelingen, A.C.: *See* van Gool, C.J.A.W., 543
Vecchia, M.G.: *See* Cavaglieri, C.R., 555
Veerkamp, J.H.: *See* Piot, C., 231

Wada, M.: *See* Aoyama, Y., 306
Wakayama, M.: *See* Oda, H., 568
Wander, R.C.: *See* Moore, M.A., 341
Wang, J.J.-L., Hua, Z., Fentress, H.M., and Singleton, C.K. JNK1 is inactivated during thiamine deficiency-induced apoptosis in human neuroblastoma cells, 208
Weir, A.: *See* Hunter, K.A., 408
Werman, M.J.: *See* Millo, H., 374
West, C.E.: *See* Roodenburg, A.J.C., 223
Weusten-van der Wouw, M.P.M.E.: *See* Terpstra, A.H.M., 311
Whanger, P.D.: *See* Moore, M.A., 341
Willis, G.M.: *See* Spurlock, M.E., 260
Wilson, T.A., DeSimone, A.P., Romano, C.A., and Nicolosi, R.J. Corn fiber oil lowers plasma cholesterol levels and increases cholesterol excretion greater than corn oil and similar to diets containing soy sterols and soy stanols in hamsters, 443

Xia, Y.-M.: *See* Moore, M.A., 341

Yahaya, A.: *See* Ismail, M., 536
Yamada, K.: *See* Yamasaki, M., 467
Yamagishi, H., Okazaki, H., Shimizu, M., Izawa, T., and Komabayashi, T. Relationships among serum triacylglycerol, fat pad weight, and lipolysis in iron-deficient rats, 455
Yamasaki, M., Mansho, K., Ogino, Y., Kasai, M., Tachibana, H., and Yamada, K. Acute reduction of serum leptin level by dietary conjugated linoleic acid in Sprague-Dawley rats, 467
Yamashita, M.: *See* Hung, M.-C., 159
Yang, B., Kalimo, K.O., Tahvonen, R.L., Mattila, L.M., Katajisto, J.K., and Kallio, H.P. Effect of dietary supplementation with sea buckthorn (*Hippophaë rhamnoides*) seed and pulp oils on the fatty acid composition of skin glycerophospholipids of patients with atopic dermatitis, 338
Yang, B.: *See* Johansson, A.K., 491
Yeh, S.-L., and Hu, M.-L. Antioxidant and pro-oxidant effects of lycopene in comparison with β-carotene on oxidant-induced damage in Hs68 cells, 548
Yoshida, A.: *See* Oda, H., 568
Young, T.L.: *See* Ramjiganesh, T., 358

Zhu, Q.Y., Huang, Y., and Chen, Z.Y. Interaction between flavonoids and α-tocopherol in human low density lipoprotein, 14

Subject Index

Absorption, 244, 482, 500, 562
Acetoacetate esters, 281
Acetylcholine, 2, 159
Adipocytes, 139, 455
Aged rats, 122
Aging, 581
Aldehydes, 425
Alkaline sphingomyelinase, 192
Allergy, 332
Alpha-linolenic acid, 543
Amino acid, 81
Amino acid sequence, 94
Angiotensin I-converting enzyme, 450
Antioxidant capacity, 585
Antioxidant enzymes, 293
Antioxidants, 76, 114, 122, 536
Antiproliferation, 267
Apolipoprotein A-I, 568
Apoptosis, 208
Arachidonic acid, 509
Area under the curve (AUC), 170
Arrhythmia, 38
Ascorbic acid, 401
Astaxanthin, 482
Atopic dermatitis, 338
ATP-dependent proteolysis, 431
Availability, 62

BB rats, 515
Beer, 76
Berry oil, 491
Bile acids, 69, 358
Bioavailability, 109
Bioperine, 109
Black pepper, 109
Body composition, 184
Body weight, 530
Bone marrow erythroblasts, 367
Brush border membrane vesicles, 436
1,3-Butanediol, 281

Caco-2, 62
Caco-2 intestinal cells, 574
Cafestol, 311
Caffeine, 521
Calcium, 500
Calcium acetate, 62
Calcium carbonate, 62
Cardiac and skeletal muscles, 231
Cardiomyocytes, 38
Cardiovascular disease, 491
Carnitine, 521 α-Carotene, 574
β-Carotene, 348, 436, 548, 574
Carotenoid bioavailability, 574
Carrier-mediated iron uptake, 367
Catechin, 536
Cell culture, 548
CETP, 318
Chocolate, 250
Cholecystokinin, 52
Cholesterol, 244, 250, 255, 288, 311, 568
Cholesterol biosynthesis, 176
Cholesterol esters, 69
Cholesterol secretion, 176
Choline, 521
Choline acetyltransferase, 159
Cholinergic, 2
cJun amino terminal kinases, 208
Coconut oil, 231
Coenzyme Q10, 109
Coffee oil, 311
Conjugated linoleic acid, 467
Conjugated linoleic acid mixture, 184
Copper deficiency, 374
Corn fiber oil, 443
Corn husk oil, 358
Cross-reactivity, 332
Cultured rat hepatocytes, 198
Curcumin, 509
Cysteine, 562
Cytochrome P-450, 568

Daidzein, 326
Diacylglycerol, 192
Diet, 250, 288, 461, 543
Dietary amino acids, 52
Dietary carbohydrates, 22
Dietary casein, 306
Dietary fat, 87, 260
Dietary oxidized linoleic acid, 176
Dietary protein, 52
Differentiation, 153
Digalactosyldiacylglycerol, 147
Digestion, 147
Dinitrophenol, 562
Dioxygenase, 348
DL-α-lipoic acid, 122
DNA damage, 401, 548
Docosahexaenoic acid, 38, 382
DPPH radical, 128
Dyslipemia, 273

Emulsion, 45
Energy balance, 530
Epilepsy, 281
Epoxides, 425
Erythrocyte, 81, 114
Essential, 543
Ethanol, 76, 509
Ex vivo, 216
Excretion, 176
Exercise, 81, 288, 521, 581

F_{1+2}, 408
Fasting, 318
Fat oxidation, 521
Fatigue, 81
Fatty acid, 192
Fatty acid composition, 467
Fatty acid metabolism, 198
Fatty acid oxidation, 231
Fatty acids, 153, 260, 543
Fatty acids (n-3), 273
Fatty liver, 306

Fecal cholesterol, 443
Fermentation, 500
Fiber, 255
Fibrinogen, 408
Fish nutrition, 22
Fish oil, 273
Flavonoids, 348
Folate, 165
Free radical scavenging activity, 128
Free radicals, 382
Fructose, 374
FVIIc, 408

Gastric lipase, 45
Gender, 374
Genistein, 326
Gerbils, 311
Ghee, 69
Glucose, 318
Glucose intolerance, 30
Glucose tolerance, 170
Glucose-6-phosphatase expression, 22
GLUT4, 420
Glutaminase, 393
Glutamine, 81
Glutamine synthetase mRNA, 393
Glutathione peroxidase, 341, 425
Gold thioglucose, 87
Green tea extract, 45
Green tea polyphenols, 216
Guinea pigs, 358

HDL cholesterol, 288
HDLs, 461
Heme, 562
Hemoglobin adducts, 425
Hepatic catalase, 184
Hepatic lipids, 184
High density lipoprotein, 568 *Hippophaë rhamnoides*, 338
HMG CoA reductase, 69
Homocysteine, 165
Human, 76, 482
Human milk, 94, 332
Humans, 216, 250, 585
8-hydroxydeoxyguanosine, 401
Hydroxyl radical, 128
25-hydroxyvitamin D_3 (25-OH-D_3), 170
Hypercholesterolemia, 293
Hyperlipidic diet, 530
Hypertriglyceridemia, 30

Ibotenic acid, 159
Immune response, 515
In vitro digestion, 574
Inflammation, 581
Inhibition, 348
Inhibitory activity, 450
Insulin, 318
Insulin resistance, 30, 273, 420
Insulin tolerance, 170
Intestine, 147, 244, 393, 496

Ion currents, 382
Iron, 62, 103, 562
Iron deficiency, 223, 455
Isoflavones, 326
Isolated rat heart, 30

Kempferol, 14
Keratinocytes, 267
Ketogenic diet, 281
Ketone bodies, 281

Lactoperoxidase, 94
Lag time, 216
Large intestine, 500
LDL, 585
LDL cholesterol, 288, 358, 443
LDL oxidation, 216
Leptin, 260, 431, 467
Leukocytes, 555
Linoleic acid, 408, 543
Lipid metabolism, 420
Lipid peroxidation, 122, 293, 425, 548
Lipids, 250, 255, 461
Lipogenesis, 87
Lipolysis, 455
Lipoprotein lipase, 132
Lipoproteins, 132, 482
Liver, 318, 374
Low density lipoproteins, 14
Lutein, 574
Lycopene, 548

Magnesium, 500
Maternal diet, 332
MCT, 288
Mechanisms, 562
Membrane fluidity, 408
Messenger RNA, 52
Metabolism, 374, 555
Methionine synthase, 165
Mg deficiency, 103
Milk plasma, 341
Mitochondria, 231
Monogalactosyldiacylglycerol, 147
Morin, 14
MRNA, 139
Myeloperoxidase, 94
Myricetin, 14
Myristic acid, 198

N-acetylcysteine, 509
Neuroblastoma, 208
Neurotrophic factors, 2
Neutral sterols, 358
Norepinephrine, 455
Nutritional composition, 536

Oat bran, 555
Obesity, 87, 153, 530
Obob, 87
8-OHdG, 581
Oleic acid, 408
Oleoyl-estrone, 530
Orotic acid, 306 β-Oxidation, 198
Oxidative stress, 581
Oxysterols, 293

PAI-1 activity, 408
Palmitic acid, 198
Pancreatic lipase, 45
Pathology, 223
Peptide from casein, 128
Peroxidation, 341
Phenolics, 585
Phenylketonuria, 543
Phosphatidic acid, 192
Phosphatidylcholine, 159, 192
Phosphatidylethanolamine, 192
Phosphatidylinositol, 192
Phosphatidylserine, 192
Phospholipids, 509
Phosphorylcholine, 192
Phytoestrogens, 326
Phytosterols, 153
Pigs, 139
Piper nigrum, 109
Piperine, 109
Plasma, 482, 585
Plasma lipids, 408
Platelet aggregation, 491
Platelets, 408 *Platycodon grandiflorum*, 420
Polychlorinated biphenyls, 568
Polyphenols, 76
Polyunsaturated fatty acids, 38, 382
Porcine, 260
PPARγ, 260
Pregnant women, 341
Preruminant calves, 231
Prostaglandin E_1 receptor, 408
Prostaglandins, 509
Protein degradation, 496
Protein kinase C, 159, 474
Protein turnover, 431
Proteolysis, 431, 496

Quercetin, 14, 348

Rabbits, 293
Rainbow trout, 22
Rat, 103, 184, 436, 555
Rat colon, 474
Rat liver microsomes, 176
Rats, 52, 132, 147, 223, 244, 293, 311, 374, 455, 521
Reactive oxygen species, 114
Red cell metabolism, 223
Red meat, 474
Red wine polyphenols, 114
Reperfusion, 382
Retinoic acid, 2
Retinyl ester hydrolase, 436
Rheumatoid arthritis, 581

Saturated fatty acids, 69
SDS-PAGE, 318
Sea buckthorn, 491
Sea buckthorn oils, 338
Selenium, 341
Selenium deficiency, 425
Serum lipids, 306
Serum lipoproteins, 184
Serum ornithine carbamoyltransferase, 306
Serum tryglycerides, 132 β-Sitosterol, 153
Skeletal muscle, 273, 431
Skin, 267
Skin fatty acids, 338
Soy stanols, 443
Soybean phosphatidylcholine, 461
Sphingomyelin, 244
Sphingomyelin digestion, 192
Spingomyelinase, 474
Spontaneously hypertensive rat, 450
Stability, 14
Starvation, 139, 393, 496
Stearic acid, 408
Stereoisomers, 482
Strenuous exercise, 367
Stress, 401 *Strobilanthes crispus*, 536
Sucrose-rich diet, 30, 273
Superoxide anion radical, 128

Taurocholenic acid, 87
Tea, 585
Tetrapeptide from wakame, 450
Tetrazolium salt XTT, ESR; 128
Thiamine deficiency, 208
Thymidine incorporation, 267 α-Tocopherol, 14
Total antioxidant activity, 536
t-PA activity, 408
Trace elements, 500
Transcription factors, 139
Transcripts, 139
Transferrin glycosylation, 223
Transferrin-free iron, 367
TRAP, 76
Triglyceride, 45, 153
Trypsinogen isozyme, 52
Tryptophan, 81
Type I diabetes, 515

Ubiquitin, 431

Vitamin A, 2, 515
Vitamin A deficiency, 223, 436
Vitamin B_{12}, 159
Vitamin D_3, 170
Vitamin E, 341
Vitamins, 216
VO_2max, 521

Wasting, 496
Wheat bran, 555
White adipose tissue, 467
White blood cells, 401
Wine, 585

Xenobiotics, 568

Zinc, 515
Zinc deficiency, 132, 165
Zucker *fa/fa* rat, 530
Zucker rats, 420